

# APPENDIX A. Acronyms and Glossary

## Acronyms

ADA	Americans with Disabilities Act
AHPA	Archaeological and Historic Preservation Act
ARPA	Archaeological Resources Protection Act
BLM	Bureau of Land Management
B.t.i.	Bacillus thuringiensis israelensis
CCP	Comprehensive Conservation Plan
CFR	Code of Federal Regulations
EA	Environmental Assessment
EE	Environmental Education
FMP	Fire Management Plan
FWS	U.S. Fish and Wildlife Service (also, Service, USFWS)
GAP	Gap Analysis Program
GIS	Geographic Information System
HMP	Habitat Management Plan
IAC	Interagency Committee for Outdoor Recreation (Washington State)
MMS	Maintenance Management System
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MSL	Mean Sea Level
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
NWR	National Wildlife Refuge
NWRS	National Wildlife Refuge System
PIF	Partners in Flight
RNA	Research Natural Area
RONs	Refuge Operating Needs System
SCORP	Statewide Comprehensive Outdoor Recreation Plan
Service	U.S. Fish and Wildlife Service (also FWS, USFWS)
TNC	The Nature Conservancy
USFWS	U.S. Fish and Wildlife Service
WDFW	Washington State Department of Fish and Wildlife
WSPRC	Washington State Parks and Recreation Commission

## Glossary

**Adaptive Management.** Refers to a process in which policy decisions are implemented within a framework of scientifically driven experiments to test predictions and assumptions inherent in management planning. Analysis of results help managers determine whether current management should continue as is or whether it should be modified to achieve desired conditions.

**Alluvium.** Sediment transported and deposited in a delta or riverbed by flowing water.

**Alternative.** Alternatives are different means of accomplishing refuge purposes and goals and contributing to the System mission (Service Manual 602 FW 1.5). The no action alternative is current refuge management while the action alternatives are all other alternatives.

**Anadromous.** Migratory fishes that spend most of their lives in the sea and migrate to fresh water to breed.

**Approved Acquisition Boundary.** A National Wildlife Refuge boundary approved by the National or Regional Fish and Wildlife Service Director for potential acquisition of lands by the Service.

**Archeology.** The scientific study of material evidence remaining from past human life and culture.

**Bacillus thuringiensis israelensis (B.t.i.).** A biological agent used to kill mosquito larvae. This microbial insecticide can also impact other Dipteran (flies) species.

**Biological Diversity (also Biodiversity).** The variety of life and its processes, including the variety of living organisms, the genetic differences among them, and the communities and ecosystems in which they occur (Service Manual 601 FW 3). The System's focus is on indigenous species, biotic communities, and ecological processes.

**Biological Integrity.** Biotic composition, structure, and functioning at genetic, organism, and community levels comparable with historic conditions, including the natural biological processes that shape genomes, organisms, and communities (Service Manual 601 FW 3).

**Birds of Conservation Concern.** Species, subspecies, and populations of migratory nongame birds identified by the U. S. Fish and Wildlife Service as likely to become candidates for listing under the Endangered Species Act unless additional conservation actions are taken.

**Blockage.** When used in reference to anadromous fish habitat, a "complete blockage" occurs when conditions fully block all life stages of all salmonid fish species to upstream migration. A "partial blockage" occurs when conditions prevent a species or life stages of a species of salmon to complete its upstream migration. See WDFW website <http://wdfw.wa.gov/mapping/salmonscape>.

**Candidate Species (Federal).** Fish, wildlife, and plant species that the U.S. Fish and Wildlife Service will review for possible listing as Federally Endangered or Threatened. A species will be considered for designation as a Federal Candidate if sufficient evidence suggests that its status may meet the listing criteria defined for Federally Endangered or Threatened.

**Candidate Species (State).** Fish, wildlife, and plant species that a state will review for possible listing as State Endangered, Threatened, or Sensitive. A species will be considered for designation as a State Candidate if sufficient evidence suggests that its status may meet the listing criteria defined for State Endangered, Threatened, or Sensitive.

**Categorical Exclusion.** A category of actions that do not individually or cumulatively have a significant effect on the human environment and have been found to have no such effect in procedures adopted by a Federal agency pursuant to the National Environmental Policy Act (40 CFR 1508.4).

**Compatibility Determination.** A written determination signed and dated by the refuge manager and Regional Chief signifying that a proposed or existing use of a national wildlife refuge is a compatible use or is not a compatible use. The Director makes this delegation through the Regional Director. (Service Manual 603 FW 2)

**Compatible Use.** A wildlife-dependent recreational use or any other use of a refuge that, in the sound professional judgment of the Director, will not materially interfere with or detract from the fulfillment of the Mission of the System or the purposes of the refuge (Service Manual 603 FW 3 ). A compatibility determination supports the selection of compatible uses and identifies stipulations or limits necessary to ensure compatibility.

**Comprehensive Conservation Plan.** A document that describes the desired future conditions of the refuge, and provides long-range guidance and management direction for the refuge manager to accomplish the purposes of the refuge, contribute to the mission of the System, and to meet other relevant mandates (Service Manual 602 FW 1.5).

**Conservation Target.** A set of features or elements of biological diversity, that are the focus of conservation within a system of conservation areas.

**Contaminants.** or Environmental contaminants - Chemicals present at levels greater than those naturally occurring in the environment resulting from anthropogenic or natural processes that potentially result in changes to biota at any ecological level. Pollutants that degrade other resources upon contact or mixing.

**Cooperative Agreement.** This is a simple habitat protection action, and no property rights are acquired. An agreement is usually long term but can be modified by either party. They are most effective in establishing multiple use management of land. An example would be a wildlife agreement on a Corps reservoir.

**Cover Type.** The present vegetation of an area.

**Cultural Resources.** The physical remains, objects, historic records, and traditional lifeways that connect us to our nation's past.

**Cultural Resource Inventory.** A professionally conducted study designed to locate and evaluate evidence of cultural resources present within a defined geographic area. Inventories may involve various levels, including background literature search, comprehensive field examination to identify all exposed physical manifestations of cultural resources, or sample inventory to project site distribution and density over a larger area. Evaluation of identified cultural resources to determine eligibility for the National Register follows the criteria found in 36 CFR 60.4 (Service Manual 614 FW 1.7).

**Deciduous.** Describes trees and shrubs which shed all of their leaves each year.

**Disturbance.** Significant alteration of habitat structure or composition. May be natural (e.g., fire) or human-caused events (e.g., aircraft overflight).

**Draw-down.** The controlled reduction of water in managed wetlands.

**Ecological Attribute.** A characteristic or condition required to support the life history, habitat, physical processes, or community interaction of conservation targets.

**Ecosystem.** A dynamic and interrelating complex of plant and animal communities and their associated non-living environment.

**Ecosystem Management.** Management of natural resources using system-wide concepts to ensure that all plants and animals in ecosystems are maintained at viable levels in native habitats and basic ecosystem processes are perpetuated indefinitely.

**Ecotone.** A transitional zone between two communities containing the characteristic species of each.

**Emergent Vegetation** is defined as herbaceous plants that require a water environment to grow for at least part of their life cycle, stem structure is rigid and self-supporting and vegetative growth continues above the waterline.

**Environmental Assessment.** A concise public document, prepared in compliance with the National Environmental Policy Act, that briefly discusses the purpose and need for an action, alternatives to such action, and provides sufficient evidence and analysis of impacts to determine whether to prepare an environmental impact statement or finding of no significant impact (40 CFR 1508.9).

**Endangered Species (Federal).** A plant or animal species listed under the Endangered Species Act that is in danger of extinction throughout all or a significant portion of its range.

**Endangered Species (State).** A plant or animal species in danger of becoming extinct or extirpated in Washington within the near future if factors contributing to its decline continue. Populations of these species are at critically low levels or their habitats have been degraded or depleted to a significant degree.

**Environmental Education Facility.** A building with one or more classrooms and environmental education materials to accommodate groups of students.

**Environmental Education Field Sites.** Outdoor locations where groups of students receive hands-on environmental education.

**Environmental Health.** Composition, structure, and functioning of soil, water, air, and other abiotic features comparable with historic conditions, including the natural abiotic processes that shape the environment (Service Manual 601 FW 3).

**Enhancement.** Improvement, especially for the benefit of habitats and/or species.

**Estuarine.** Deepwater tidal habitats and adjacent tidal wetlands that are usually partly enclosed by land but have some access to the open ocean and are diluted by freshwater.

**Exotic Species.** A species from another part of the world. A non-native species.

**Finding of No Significant Impact (FONSI).** A document prepared in compliance with the National Environmental Policy Act, supported by an environmental assessment, that briefly presents why a Federal action will have no significant effect on the human environment and for which an environmental impact statement, therefore, will not be prepared (40 CFR 1508.13).

**Focal Conservation Target.** A suite of conservation targets that for purposes of planning are sorted and condensed to represent threats to biological integrity, diversity, and environmental health at the Refuge level.

**Gateway Center.** A building and staff which provide visitors with interpretation, education, and general information about the natural and cultural resources of the refuge and the local area. The Steigerwald Gateway Center serves as a “gateway” to the Columbia River Gorge.

**Goal.** Descriptive, open-ended, and often broad statement of desired future conditions that conveys a purpose but does not define measurable units (Service Manual 602 FW 1.5).

**Habitat.** Suite of existing environmental conditions required by an organism for survival and reproduction. The place where an organism typically lives.

**Habitat Connectivity (Also Landscape Connectivity).** The arrangement of habitats that allows organisms and ecological processes to move across the landscape; patches of similar habitats are either close together or linked by corridors of appropriate vegetation. The opposite of fragmentation.

**Habitat Management Plan.** A plan that guides refuge activities related to the maintenance, restoration, and enhancement of habitats for the benefit of wildlife, fish, and plant populations.

**Habitat Restoration.** Management emphasis designed to move ecosystems to desired conditions and processes, and/or to healthy ecosystems.

**Headquarters.** An administrative center.

**Head-started.** A phrase used in this document relating to propagation of turtles. Head-started turtles are used as a strategy to establish new populations of western pond turtle in Washington. Turtle eggs are collected from existing populations of pond turtles. The eggs are hatched and reared in captivity and subsequently released back to the wild.

**Historic Conditions.** Composition, structure, and functioning of ecosystems resulting from natural processes that we believe, based on sound professional judgment, were present prior to substantial human related changes to the landscape (Service Manual 601 FW 3).

**Hydrology.** A science dealing with the properties, distribution, and circulation of water on and below the earth's surface and in the atmosphere.

**Hydrograph.** A graph of water flows in a river or stream. A hydrograph provides a way of seeing seasonal and yearly changes in the flow or discharge of a waterway.

**Hydroperiod.** A segment of a hydrograph for a specific timeframe.

**Indicator.** Something that serves as a sign or symptom.

**Inholding.** Refers to lands within an Approved Acquisition Boundary for a refuge, that are not owned by the Fish and Wildlife Service. These can be private lands or lands owned by city, county, state, or other federal agencies.

**Interpretation.** A teaching technique that combines factual information with stimulating explanation. Frequently used to help people understand natural and cultural resources.

**Interpretive Trail.** A trail with informative signs, numbered posts that refer to information in a brochure, or where guided talks are conducted for the purpose of providing factual information and stimulating explanations of what visitors see, hear, feel, or otherwise experience while on the trail.

**Invasive Species.** Species of plants and animals that have the potential to rapidly colonize and dominate an area.

**Issue.** Any unsettled matter that requires a management decision (e.g., a Service initiative, opportunity, resource management problem, a threat to the resources of the unit, conflict in uses, public concern, or the presence of an undesirable resource condition) (Service Manual 602 FW 1.5).

**Lacustrine.** Permanent lakes and reservoirs that exceed 6 feet in depth and lack trees, shrubs, and persistent emergent vegetation.

**Land Protection.** The acquisition of fee-title, easement, or lease of a given land parcel to protect important natural resource values on the land from incompatible land uses.

**Landform.** A natural feature of a land surface.

**Maintenance.** The upkeep of constructed facilities, structure and capitalized equipment necessary to realize the originally anticipated useful life of a fixed asset. Maintenance includes preventative maintenance; cyclic maintenance; repairs; replacement of parts, components, or items of equipment, periodic condition assessment; periodic inspections, adjustment, lubrication and cleaning (non-janitorial) of equipment; painting, resurfacing, rehabilitation; special safety inspections; and other actions to assure continuing service and to prevent breakdown.

**Maintenance Management System (MMS).** A national database of refuge maintenance needs and deficiencies. It serves as a management tool for prioritizing, planning, and budgeting purposes.

**Managed field.** Refuge grasslands maintained for winter goose forage by mowing, haying, grazing, or burning.

**Mean sea level (MSL).** The average level of the surface of the ocean, used as a standard in determining land elevation or sea depths.

**Metapopulation.** A population within a population. Used to distinguish a group of individuals of a particular species that may be uniquely identified from the larger population by time, space, or some other factor.

**Migration.** The seasonal movement from one area to another and back.

**Migratory Birds.** Those species of birds listed under 10.13 of 50 CFR chapter 1-USFWS, DOI.

**Monitoring.** The process of collecting information to track changes of selected parameters over time.

**Monoculture.** Vegetation composed primarily of a single species, such as in areas dominated by invasive weeds.

**Native Species.** With respect to a particular ecosystem, a species that, other than as a result of an introduction, historically occurred or currently occurs in that ecosystem. (Service Manual 601 FW 3).

**National Register of Historic Places.** The Nation's master inventory of known historic properties administered by the National Park Service. Includes buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archeological, or cultural significance at the national, state, and local levels.

**National Wildlife Refuge.** A designated area of land, water, or an interest in land or water within the System.

**National Wildlife Refuge System.** Various categories of areas administered by the Secretary of the Interior for the conservation of fish and wildlife, including species threatened with extinction; all lands, waters, and interests therein administered by the Secretary as wildlife refuges; areas for the protection and conservation of fish and wildlife that

are threatened with extinction; wildlife ranges; games ranges; wildlife management areas; or waterfowl production areas.

**Neotropical Migrant.** A bird that winters in southern Mexico, Central and South America, or the West Indies and migrates northward to breed in North America.

**Nephelometric Turbidity Units.** A unit of turbidity measured with a nephelometer, which is a device for measuring particle size and concentrations in liquids.

**Nonnative species.** An introduced species that did not naturally occur in an area. See also exotic species.

**Nonpoint source.** Coming from more than one location. Frequently refers to pollution or erosion that comes from a widespread area and accumulates in streams and rivers.

**Noxious Weed.** A plant species designated by Federal or State law as generally possessing one or more of the following characteristics: aggressive or difficult to manage; parasitic; a carrier or host of serious insect or disease; or non-native, new, or not common to the United States, according to the Federal Noxious Weed Act (PL 93-639), a noxious weed is one that causes disease or had adverse effects on man or his environment and therefore is detrimental to the agriculture and commerce of the United States and to the public health.

**Objective.** An objective is a concise target statement of what will be achieved, how much will be achieved, when and where it will be achieved, and who is responsible for the work. Objectives are derived from goals and provide the basis for determining management strategies. Objectives should be attainable and time-specific and should be stated quantitatively to the extent possible. If objectives cannot be stated quantitatively, they may be stated qualitatively (Service Manual 602 FW 1.5).

**Old field.** Refuge grasslands left relatively unmanaged to provide food and cover for a variety of native wildlife. Control of noxious weeds does occur on old fields.

**Operations.** Activities related to the normal performance of the functions for which a facility or item of equipment is intended to be used. Costs such as utilities (electricity, water, sewage) fuel, janitorial services, window cleaning, rodent & pest control, upkeep of grounds, vehicle rentals, waste management, and personnel costs for operating staff are generally included within the scope of operations.

**Outreach.** The process of providing information to the public on a specific issue through the use of the media, printed materials, and presentations.

**Pacific Flyway.** One of several major north-south travel corridors for migratory birds. The Pacific Flyway is west of the Rocky Mountains.

**Palustrine.** Freshwater wetlands that are less than 2 meters deep at low water. They do not include areas regularly impacted by waves or part of a bedrock shoreline. They are familiarly known as marshes, swamps, bogs, wet meadows, prairies, and small shallow ponds.

**Plant Association.** A classification of plant communities based on the similarity in dominants of all layers of vascular species in a climax community.

**Plant Community.** An assemblage of plant species unique in its composition; occurs in particular locations under particular influences; a reflection or integration of the environmental influences on the site such as soils, temperature, elevation, solar radiation, slope, aspect, and rainfall; denotes a general kind of climax plant community (e.g., ponderosa pine).

**Preferred Alternative.** This is the alternative determined [by the decision maker] to best achieve the Refuge purpose, vision, and goals; contributes to the Refuge System mission, addresses the significant issues; and is consistent with principles of sound fish and wildlife management.

**Preplanning.** The first phase of comprehensive conservation planning process. It includes identifying the planning area and data needs; establishing the planning team and planning schedule; reviewing available information; preparing a public involvement plan and conducting internal scoping.

**Priority Public Uses.** Hunting, fishing, wildlife observation and photography, environmental education and interpretation were identified by the National Wildlife Refuge system Improvement Act of 1997 as the six priority public uses of the National Wildlife Refuge System.

**Priority Species.** Fish and wildlife species that the Washington Department of Fish and Wildlife believe require protective measures and/or management guidelines to ensure their perpetuation. Priority species include the following: (1) State-listed and candidate species; (2) species or groups of animals susceptible to significant population declines within a specific area or statewide by virtue of their inclination to aggregate (e.g., seabird colonies); and (3) species of recreation, commercial, and/or tribal importance.

**Public.** Individuals, organizations, and groups; officials of Federal, State, and local government agencies; Indian tribes; and foreign nations. It may include anyone outside the core planning team. It includes those who may or may not have indicated an interest in Service issues and those who do or do not realize Service decisions may affect them.

**Public Use Area.** A designated area within the Turnbull NWR which is open to the public year-round. All trails and facilities with the exception of those associated with Columbia Plateau trail are within the public use area.

**Raptor.** A category of carnivorous birds, most of which have heavy, sharp beaks, strong talons, and take live prey (e.g., peregrine falcon, bald eagle).

**Refuge Operating Needs System (RONS).** A national database of unfunded refuge operating needs required to meet and/or implement station goals, objectives, management plans, and legal mandates. It is used as a planning, budgeting, and communication tool describing funding and staffing needs of the Refuge System.

**Refuge Purpose(s).** The purpose(s) specified in or derived from the law, proclamation, executive order, agreement, public land order, donation document, or administrative memorandum establishing, authorizing, or expanding a refuge, a refuge unit, or refuge subunit (Service Manual 602 FW 1.5).

**Research Natural Area.** A federal land designation that establishes areas with predominantly natural conditions and processes for research and educational purposes.

**Restoration.** The act of bringing back to a former or original condition.

**Revenue Sharing.** Service payments (government lands are exempt from taxation) made to counties in which national wildlife refuges reside. These payments may be used by the counties for any governmental purpose such as, but not limited to, roads and schools.

**Riparian.** Refers to an area or habitat that is transitional from terrestrial to aquatic ecosystems; including streams, lakes wet areas, and adjacent plant communities and their associated soils which have free water at or near the surface; an area whose components are directly or indirectly attributed to the influence of water; of or relating to a river; specifically applied to ecology, “riparian” describes the land immediately adjoining and directly influenced by streams. For example, riparian vegetation includes any and all plant life growing on the land adjoining a stream and directly influenced by the stream.



**Riverine.** Flowing perennial to intermittent waters bounded by a channel. This habitat encompasses a river or stream, its channel, and the associated aquatic vegetation.

**Salmonid.** A category of fish that includes salmon, steelhead, and trout.

**Scoping.** Using news releases, and other appropriate media to notify the public of the opportunity to participate in the planning process and to help identify issues, concerns, and opportunities related to the project.

**Seral.** Of or relating to an ecological sere; a seral stage.

**Songbirds (Also Passerines).** A category of birds that are medium to small, perching landbirds. Most are territorial singers and migratory.

**Special Status Species.** Fish, wildlife and plant species that have special conservation status because they have been listed under one or more authorities such as Endangered Species Act, State-listed species, Birds of Conservation Concern and others.

**Step-down Plan.** A step-down plan provide the details necessary to implement management strategies identified in the Comprehensive Conservation Plan (Service Manual 602 FW 1.5).

**Strategy.** A specific action, tool, or technique or combination of actions, tools, and techniques used to meet unit objectives (Service Manual 602 FW 1.5).

**Talus.** A sloping mass of rock debris at the base of a cliff.

**Threatened Species (Federal).** Species listed under the Endangered Species Act that are likely to become endangered within the foreseeable future throughout all or a significant portion of their range.

**Threatened Species (State).** A plant or animal species likely to become endangered in Washington within the near future if factors contributing to population decline or habitat degradation or loss continue.

**Threshold.** The lowest level or intensity at which a stimulus is perceptible or can produce an effect. This term is sometimes used in connection with monitoring the effects of public uses on natural resources.

**Turbidity.** A measurement of clarity of water based on particles suspended in the water. It is measured with a nephelometer, which indicates the amount of light that passes through (or is scattered by) a column of water.

**Vegetation Type (Also Habitat Type, Forest Cover Type).** A land classification system based upon the concept of distinct plant associations.

**Vision Statement.** A concise statement of the desired future condition of the planning unit, based primarily upon the System mission, specific refuge purposes, and other relevant mandates (Draft Service Manual 602 FW 1.5).

**Watershed.** The region or area drained by a river system or other body of water. (Webster's II) See also subwatershed.

**Weir.** A fence or wattle placed in a stream to catch or retain fish.  
A dam placed across a river or canal to raise or divert the water, as for a millrace, or to regulate or measure the flow.

**Wetlands.** Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water at some time during the growing season of each year

(Service Manual 660 FW 2). **Permanent wetland** - a wetland basin or portion of a basin that is covered with water throughout the year in all years except extreme drought. Typically the basin bottom is vegetated with submerged aquatic plant species including milfoil, coontail, and pondweeds. **Semi-permanent wetland** - a wetland basin or portion of a basin where surface water persists throughout the growing season of most years. Typical vegetation is composed of cattails and bulrushes. **Seasonal wetland** - a wetland basin or portion of a basin where surface water is present in the early part of the growing season but is absent by the end of the season in most years. Typically vegetated with sedges, rushes, spikerushes or burreed.

**Wildlife-dependent Recreation.** Hunting, fishing, wildlife observation and photography, environmental education and interpretation. These are also referred to as priority public uses of the National Wildlife Refuge System.